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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,132	12/05/2005	Stefan Wilhelm	LINDE-627	2561

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EXAMINER	
PETTITT, JOHN F	

ART UNIT	PAPER NUMBER
3744	

NOTIFICATION DATE	DELIVERY MODE
03/02/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mwzb.com

Office Action Summary	Application No.	Applicant(s)	
	10/520,132	WILHELM, STEFAN	
	Examiner	Art Unit	
	John F. Pettitt	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-5 and 7-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-5 and 7-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/14/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 2-5, 7-28 are objected to because of the following informalities:

In regard to claims 2, the recitation, "the joints" (line 3) lacks of antecedent basis and will be assumed --joints--.

In regard to claims 7, 26, the recitation, "an enclosure around one or more parts of a low-temperature air separation system" (line 6 - claim 7; line 8, claim 27) conflicts with the previous recited enclosure and will be assumed --**the** enclosure around one or more parts of **the** low-temperature air separation system --.

All dependent claims should be introduced --The process…-- to avoid ambiguity.

In regard to claims 22, 27, the recitation, "the contact points of the panels" (line 6) lacks of antecedent basis and will be assumed --contact points of the panels--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

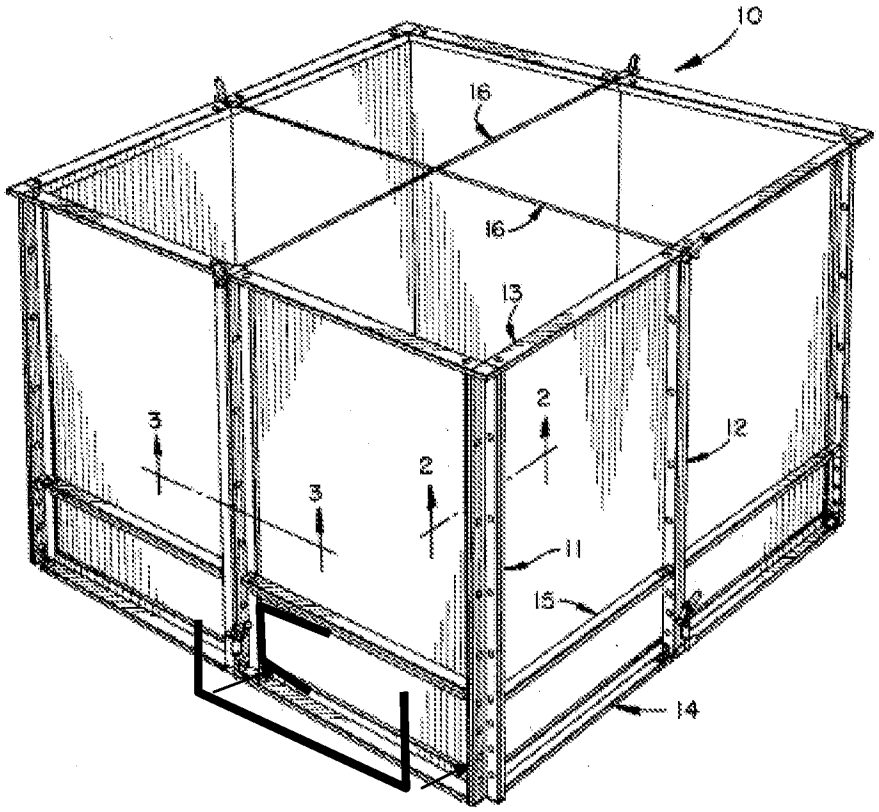
The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-5, 7-9, 11-20, 22- 24, 26- 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard (US 6167723) in view of Carren et al. (US 4331252). Guillard teaches a process for producing an enclosure for parts of a low temperature air separation system (Figure 1; column 2, line 66, distillation system), the enclosure (17) having a base and side walls (inherent to cold box 17; column 3, lines 30-35); forming the enclosure around the air separation system (distillation system); and filling the enclosure with thermal insulation (column 4, line 66).

Guillard does not explicitly teach that the cold box is formed by connecting several panels each having a frame and a sheet metal lining. However, forming enclosures of several panels is a well known method of constructing insulation containers, as is taught for example by Carren. Carren teaches an enclosure having several panels (flanges, 19), each having a frame (flanges, such as 16,18) and a sheet metal lining (19; column 3, line 5). Carren teaches that the enclosure permits various sizes to be easily created from the modular components. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ the modular enclosure of Carren in providing the cold box of Guillard for the purpose of allowing different sized cold boxes to be created with greater simplicity. Further it is noted that the frames (flanges) of Carren are each made of U-sections that run peripherally on four sides (see figure below, noted that a u-shape is highlighted and

separated from the structure to make it easier for the applicant to see that each frame may be seen to have U-sections that are on at least four sides; it is further noted that the flanges of figures 7-8 also show a U-shape); and the frames (flanges) are provided with diagonal braces (30, 40) mounted on the frames (16-18); the panels are screwed together (bolted), contact points (locations of welds for 40, 30) of the panels (flanges, 19) are sealed by a weld to make the enclosure gas-tight (since welds aide in providing structural integrity and thus provide for sealing enclosure). With regard to claims 2-3, joints (corners) of the panels (frames, 19) on one side wall all have the same distance from one another in the height direction (Fig. 1; panels of the enclosure do not get wider or narrower in the height dimension); additionally noted that Carren shows a square structure. With regard to claim 5, the panels are 2-4 meters (column 4, line 56, 4 by 8 ft). With regard to claim 12, the steel lining (19) of Carren is not explicitly taught to be of a thickness of 3-5mm. However, this is seen to be a routine design choice depending on the structural requirements of the particular cold box desired. With regard to claims 24, 28, the frames (flanges) are reinforced with vertically arranged sections (27, 38; column 4, lines 20-25). With regard to claim 14, the frames being provided with vertical stiffeners in the form of L-shaped steel sections (17).



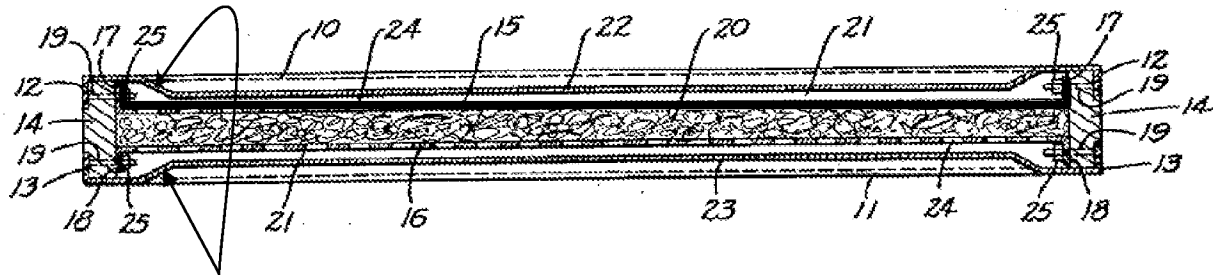
Claims 10, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard, Carren and further in view of Bracque et al. (US 5461871). With regard to claims 10 and 25, Guillard and Carren teach most of the limitations but do not explicitly teach that before installation, system parts or accessories are mounted on a panel. However, Bracque teaches that cold boxes are known to be made with a plurality system ports (33 for example) for air distillation fluid flows as well as instrumentation assemblies (121; column 3, line 36, 55). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Guillard and Carren with ports and other user accessories as taught by Bracque for the purpose of making the cold box more accessible and easier to maintain. In regard to

claim 21, official notice is taken that walkways (ladders, steps, railings etc) are a known means for making facilities more accessible for maintenance crews and therefore for the same reasons of accessibility as stated above, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to add walkways to the panels before assembly so that such means would be immediately available for use after installation.

Claims 2-5, 7-9, 11-20, 22- 24, 26- 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard (US 6167723) in view of Nystrom (US 2231216). Guillard teaches a process for producing an enclosure for parts of a low temperature air separation system (Figure 1; column 2, line 66, distillation system), the enclosure (17) having a base and side walls (inherent to cold box 17; column 3, lines 30-35); forming the enclosure around the air separation system (distillation system); and filling the enclosure with thermal insulation (column 4, line 66).

Guillard does not explicitly teach that the cold box is formed by connecting several panels each having a frame and a sheet metal lining. However, forming enclosures of several panels is a well known method of constructing insulation containers, as is taught for example by Nystrom. Nystrom teaches an enclosure having several panels (12), each having a frame (at leastflanges) and a sheet metal lining (15, 16, 10, 11). Nystrom teaches that the panel forms enclosures for refrigerated containers (column 1, line 11) and that the panels permit easy construction (column 1, line 30). Therefore, it would have been obvious to one of ordinary skill in the art, at the

time the invention was made, to employ the panels of Nystrom in providing the cold box of Guillard for the purpose of providing an easily constructed well insulated (column 1, line 13) cold box. Further it is noted that the frames (flanges) of Nystrom are each made of U-sections that run peripherally on four sides (see figure below; please note that there are a plurality of U-shapes depending on the cross-section); and the frames (16-18) are provided with diagonal braces (see figure below) mounted on the frames (flanges); the panels are screwed together (bolted), contact points (locations of bolts) of the panels (15-16, 10-11) are sealed by a weld (column 2, line 11) to make the enclosure gas-tight (as welds aide in providing structural integrity and thus provide for sealing enclosure). With regard to claim 12, the steel lining (19) of Carren is not explicitly taught to be of a thickness of 3-5mm. However, this is seen to be a routine design choice depending on the structural requirements of the particular cold box desired. With regard to claims 24, 28, the frames (flanges) are reinforced with vertically arranged sections (14).



diagonal braces

Claims 10, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard, Nystrom, and further in view of Bracque et al. (US 5461871). With regard to claims 10 and 25, Guillard and Nystron teach most of the limitations but do not explicitly

teach that before installation, system parts or accessories are mounted on a panel. However, Bracque teaches that cold boxes are known to be made with a plurality system ports (33 for example) for air distillation fluid flows as well as instrumentation assemblies (121; column 3, line 36, 55). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Guillard and Nystrom with ports and other user accessories as taught by Bracque for the purpose of making the cold box more accessible and easier to maintain. In regard to claim 21, official notice is taken that walkways (ladders, steps, railings etc) are a known means for making facilities more accessible for maintenance crews and therefore for the same reasons of accessibility as stated above, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to add walkways to the panels before assembly so that such means would be immediately available for use after installation.

Response to Arguments

Applicant's arguments with respect to claims 7, 26, and 27 have been considered but are moot in view of the new ground(s) of rejection. This Office Action is being made non-final to afford the applicant's the opportunity to respond to the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Pettitt whose telephone number is 571-272-0771. The examiner can normally be reached on M-F 8a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler or Frantz Jules can be reached on 571-272-4834 or 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John F Pettitt /
Examiner, Art Unit 3744

/Cheryl J. Tyler/
Supervisory Patent Examiner, Art Unit 3744

JFP III
February 22, 2010